

## Profile Summary

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- Research and analysis in NLP and computer vision using **Machine learning/deep learning**
- Expertise in **Pytorch, Tensorflow, Keras, NLTK, Spacy and Gensim**
- Hand-On experience in deep learning models and NLP algorithms
- Hand-on experience in Predictive modeling, Information retrieval, Pattern recognition and Image Detection
- Hand-on experience in Artificial Neural networks, Convolutional neural networks (CNN) and Recurrent neural networks (RNN)
- Hands-on experience of **Python/R/Java, Numpy/Pandas/Scipy, SQL/NoSQL and so on**

## Experience

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### Since Mar'18 with Allstate India, Bangalore as Data Scientist-AI center of excellence team

- Distracted driving model using mobile and telematics data to reduce risk of accident that can **claim lives and dollars** for insurers and insured. Deep learning computer vision model with **99% recall having 88% precision**
- Defect recommendation engine for product team to predict potential defects that could occur in future projects resulting reducing hours of corrective work and reducing cost **~\$50 million per years**
- Real-time recommendation engine for technical support team for query resolution resulting reduced average wait time from 12 min to 2 min. Hierarchical deep learning model using LSTM/GRU with **~99% accuracy**
- Helped team with various setup like Domino, UNIX dev server, AWS Sagemaker, Server DB, model deployment and so on

### Nov'15 – Mar'18 with Wipro Digital, Bangalore as Data Scientist-Holmes Team

- End-to-end solution to automate conversation for product billings. RNN with CNN for mail classification and Bidirectional LSTM for sequence modeling. Used Python with outlook API to fetch mail in real-time and reply to same.
- Deep-learning solution for very unbalanced (skewed) data using LSTM with weight balance, SMOTE. AutoEncoder for unsupervised learning approach.
- Knowledge graph using statistical modeling, Spacy, Gensim and other NLP packages and for question-answering from unstructured data
- Bot Agent using Python, MongoDB and ML models for recording the test cases and processing the same for playback
- Tracer and GIT different features for Testing Bot using Java technology, thereby reducing time and cos by 30%

## Education

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- B.Tech (IT) from Muzaffarpur Institute of Technology, Muzaffarpur, Bihar in 2015 with **CGPA 7.69**
- 12<sup>th</sup> from PCV Mahavidyalaya, BSE Board, Bihar with 66.2%
- 10<sup>th</sup> from Dr. RPH School, BSE Board, Bihar with 62%

## Certifications

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- **Convolutional Neural Networks (deeplearning.ai) by Andrew Ng, Jan'18**
- **Structuring Machine Learning Projects (deeplearning.ai) by Andrew Ng, Nov'17**
- **Improving Deep Neural Networks (deeplearning.ai) by Andrew Ng, Nov'17**
- **Neural Networks and Deep Learning (deeplearning.ai) by Andrew Ng, Oct'17**
- **Deep Learning A-Z by Kirill (Udemy), Sept'17**

## Technical Skills

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Languages: Python, Java, R, SQL  
Skills: Data Structure & Algorithms, Machine Learning, Neural Networks, NLP, Computer Vision  
Tools: Jupyter Notebook, Pycharm, Numpy/Pandas, Matplotlib/Seaborn, Pytorch/Tensorflow/Keras, AWS